SLOSAR, Jaroslav, STERBA, Vojoslav

Oxidation of methyl naphthalenes in liquid phase. Chem prus 15 no.3:142-147 Mr 165.

1. Research Institute of Organic Syntheses, Fardubice-Rybitvi.

Oxidit or of them continuives to the spins. The test them is a second of the second of

of ARROHY, Sergey Federavich, sleser'; AMGRENOLIY, B.S., red.

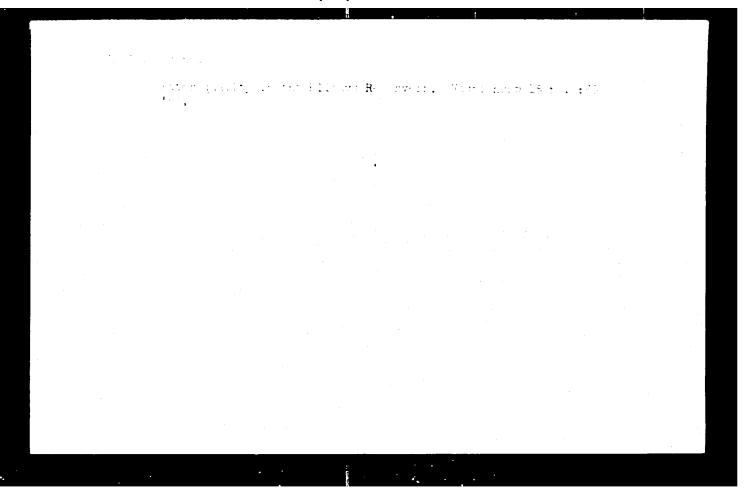
[My instruments] Mol instrumenty. Volgograd, Hizhne-Velzhakoe knizhnee izd-vo, 1965. 33 p. (MIRA 18:12)

CIA-RDP86-00513R001651410006-7

VANA, D.; SLOSAREK, M.; KROPACEK, J.; UNGR, J.; KALUSOVA, J.; LICHTENHERG, J.; VALACH, V.

Detection of Mycobacterium tuberculosis in the respiratory tract and anesthesia equipment following lung resections in tuberculosis. Cas. lek. cek. 103 no.24:656-659 12 Je\*64

1. Lecebna plcni tuberkulozy v Pasece u Sternberka (reditel: doc. dr. V. Raclavsky); Tuberkulozni oddeleni KUME [Krajsky ustav narodniho zdravi] v Praze-Veleslavin (prednosta: doc. dr. F.Polansky); Lecebna tuberkulozy na Plesi, Nova Ves pod Plesi (reditel: MUDr. J. Ungr); I. chirurgicka klinika fakulty vseobecneho lekarstvi KU [Karlovy university] v Praze (prednosta: prof. dr. J.Pavrovsky) a Ustav patologicke anatomie lekarske fakulty PU [Palackeho university] v Olomouci (prednosta: doc. dr. V.Valach).



# SLOSAROVA, Vera, MUDr.

Medical services in schools in Prague. Cesk. zdravot. 4 no.7: 365-368 July 56.

 Krajska skolni lekarka, zdrav. odbor UNV Praha. (SCHOOLS, med. servi. in Czech. (Cz))

SLOSAROVA, Vera

Investigation into overburdening of school children. Cesk pediat 17 no.2:173-176 F 162.

1. Oddeleni pece o dite UNZ NV hlavniho mesta Prahy.

(SCHOOL HEALTH)
(MENTAL DISORDERS in inf & child)

CZECHOSLOVAKIA

KUNCOVA, Z., MD. Csc; Slosarova, V. MD.

1. Children's Ward of the Faculty Polyclinic (Detske oddeleni fakultni polikliniky), Prague (for Kuncova); 2. UNZ People's Committee of the Capitol (UNZ Narodniho vyboru hlavniho mesta), Prague

Prague, Prakticky lekar, No 1, 1963, pp 10-15

Variable Var

"The Occurence of Orthopedic Defects in Children."

BUKOWY, S.; CEBULAK, S.; SLOSARZ, J.

Possibilities of polymetallic deposits occurring in the northwestern border region of the Upper Silesian Coal Basin. Przegl geol 11 no.5:226-228 My 163.

1. Gornoslaska Stacja Terenova, Instytut Geologiczny, Sosnowiec.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products. H Ceramics, Glass. Astringents. Concrete.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68194.

Author : Slosiar J.
Inst : Not given:

Title : Method of Measuring Size of Pores in Glass Filters.

Orig Pub: Sklar a keramik, 1956, 6, No 11, 270-273.

Abstract: No abstract.

Card 1/1

29

Bis Mak, J.

Distribution of dielectric losses in industrial glass.

P. /61. (STWOJNOELEKTROTECHNICKY CAROLIS) (Bratislava, Czechoslovakia) Vol. 8, no. 6, 1957

30: Monthly Index of East European Accession (EEAI) IC Vol. 7, No. 5, 1958

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their H-13 Application. Ceramics. Glass. Binding Materials. Concrete

Abs Jour : Ref Zhur - Khim., No 24, 1958, No 82422

Author + Slosier J.

Institute : Classification of Fusing Glass

Orig Pub: Sklar a keranik, 1958, 8, No 3, 79-82

Abstract: It is recommended to subdivide fusing glass (FG) into 6 following classifications: a) ordinary FG, which is manufactured by pressing and by subsequent fusing of glass powders; it differs by the open pore size (1.5 and up to 250 - 500), is employed in the extraction and filtration applications, and is manufactured at the "Caval'yer" glass applications, and is manufactured at the "Caval'yer" glass plant (Sazava CDR); b) from FG which is manufactured from glass powder with softening temperature of 5800, fusing temperature of 6800, and from the gas producing additives such as CaCO<sub>3</sub>, coke, graphite and other substances; in fusing the volume of FG increases (the volume of pores

card : 1/3

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Applications. Glass.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12560.

: Slosiar, Julius. Author

: Not given: : Influence of Temperature, Current Frequency, and Inst Title

Chemical Composition on Dielectrical Losses in

Industrial Glass.

Orig Pub: Strojnoelektrotechn. casop., 1958, 9, No 3, 158-167.

Abstract: /t low frequencies, the angle of the tangent of dielectrical lesses in technical glass is found in exponential desendence on temperature as well as in dependence on the current frequency and the concentration of alkali oxides. With frequencies of the order of 2.100, the measurement of the tangent angle of dielectrical losses with the tempera-

Card 1/3

**3**9

SLOSIAR, J.

Thermal dependence of the specific resistance of vacuum tight sintered glass. p. 115.

\*LEKTROTECHNICKY CASOPIS. Bratislava, Czechoslovakia, Vol. 10, No. 2, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 10, Oct. 1959.
Uncl.

SLOSIAR, J.

Some properties of vacuum-tight sintered glass. p. 280.

ELEKTROTECHNICKY CASOPIS. (Slovenska akademia vied.) Bratislava, Czechoslovakia. Vol. 10, no. 5, 1959.

Monthly list of Fast European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960. Uncl.

s/196/62/000/020/009/021 E194/E155

'AUTHOR:

Slosiar, Julius

TITLE:

A cathode with sealed-in ring, particularly for

quartz mercury lamps

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.20, 1962, 6, abstract 20 V 34 P. (Czechoslovak Pat. cl 21f. 82/03, 21f. 82/04, no.99396,

April 15, 1961)

Abstractor's note: Complete translation; no text.

Card 1/1

SLOSIAR, J.

Contribution of the Electrical Engineering School of the Higher School of Technology in Bratislava to the development of science and technology in Slovakia. El tech cas 14 no.8:513-519 163.

SLOSIAR, Julius, doc., inz., C.Sc.

Electrons as a working tool. Tech praca 15 no.1:12-16 J '63.

1. Katedra radiotechnologie, Slovenska vysoka skola technicka, Bratislava.

. ACC MR: APRIL 15100

SOURCE CODE: UR/0079/66/036/016/1838/1841

AUTHOR: Zayshlova, I. A.; Slosman, I. L.; Gololobov, Yu. G.

ORG: none

TITLE: Vinyl esters of phosphorus acids. VII.  $\alpha$ -alkylmercaptovinyl esters of alkyl-(dialkyl)phosphonous acids

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1838-1841

TOPIC TAGS: alkylmercaptovinyl alkylphosphonate, alkylchloromercaptovinyl dialkylphosphinate, chemical reaction, ester, phosphonic acid, mercaptan, acetate

ABSTRACT: Dialkyl esters of alkylphosphonous acids (I) react with alkylmercapto chloroacetates in nitrogen atmosphere at 80—90°C to form the corresponding esters V, VI, and VII shown in Table 1.

Ester VIII was obtained by the reaction of propyl dipropylphosphinate

with ethylmercapto chloroacetate in benzene at 20-70°C.

Card	1/4
Lara	,

UDC: 547.26'118

ACC NR: AP6033180  $(I) + \begin{cases} CII_{2}CI - C(0)SR^{*} \rightarrow II - P & OII' \\ 0 & SR^{*} \\ (V) & SR^{*} \\ (V) & OC = CIII_{2} \\ (V) & OC = CII_{2} \\ (V) & OC = CCI_{2} \\ (V) & OC = CCI_$ 

ACC NA: 7.1

O-alkyl-O-(a-alkylmercapto)vinyl alkylphosphonates

$$\begin{array}{c}
R \\
R'O
\end{array}$$

$$\begin{array}{c}
P - OC = CH, \\
0 & SR^{\bullet}
\end{array}$$
(V)

 $0-alkyl-0-(\alpha-alkylmercapto-\beta-chloro) vinyl \ alkylphosphonates$ 

 $0-alkyl-0-(\alpha-alkylmercapto-\beta,\beta-dichloro) \ vinyl \ alkylphosphonates$ 

$$\begin{array}{c}
R \\
R'O \\
0 \\
0 \\
0 \\
0
\end{array}$$
(VII)

0-(α-alkylmercapto)vinyl dialkylphosphonates

Card 3/4

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001651410006-7"

					1		KR <sub>D</sub>		Found 2			-	Calculates						
	Compdure no.	1	R X'	R. (1	Zeld (in I)	bp (p (see nt	4,20	2020	ovi	വാവം'ഗ	¢1	,	5	Formula	cı!	P	5		
			1								<del></del>	<u> </u>	<del> </del>						
	١ :	CH CH <sub>1</sub> -CHCH <sub>1</sub>		(1)112 (1)12 (1)12 (1)12	60 60	32111	1 [5a4] 1 [0][64] 1 [0][28]	47.74	62 16	42.42		14 10, 14 13 (N), 13 13 22, 13	25 15 25 16 4 25 13 61 13 7 26 13 14 13 1	e C <sub>in</sub> li <sub>n</sub> o es o C <sub>in</sub> li <sub>n</sub> o es	1 - 1	1100	11 23 13 15 12 24		
	u (	С.И. С.И. С.И., С.И.—СИ,	C.11.	Calla Calla Calla	17 45 45	1)5(0.7) 1(5(1) 144(4)	1.1601 1 1.17001 1.1336	6253 6255 6446	h2,37 h7,1/3 71,66	52.41 67,29 71.18	13 52, 13,10 13,41, 13 40 42 14, 12,20	11, 11, 11 11, 53, 11 10, 61, 19,	03 12 34, 12.7 47 11.54, 11 4 78 10 94, 11 6	il pungantus Ricumanis Aj tumborilars	13   14   13   14   12 Uh	11.29 11.35 10.43	17 3n 11 73 11 26		
	vņ (	C1114		Calla Calla Calla San	65 65 75	121 (0.5) 130 (1.5) 130 (2)	1 .26501 1 2415 1 2270 1	4990	66 67 72 48 72 42	47.28 71.89 71.89	24,55, 24,3 23,43, 23 (c 23,23, 22,8	11 (%, 11 10 21, 10 10 (%, 9	401 10 58, 10.2 59 17 27, 10 4 10 117,66, 10 7	ه درورونه ۱۹ دروزان ۱۷ دروزانه ۱۹ دروزانه	74 20 23 13 23 13	10 10 10 10 10 10	10 10 i 10 12 i 10 12		
	i Viii	сін, си,⊷сиси,	C;H;	CIH,	30	ı	1.72941			1	71.44. 21.2	13.23. 13.	1	CwHNOIS2		1212	1.		
		1	i	ı	1	l	1 1	t		į		ì			1 1	ŀ	ı		
				-								[WA	-50; C	BE No.	12]			•	
SUB CODE	: 07	/ SUBN	e D.	ATE:	3.0	June	55/	OI	RT C	RE	F: (	16/						•	-
OB CODE	. 0,	, 505.			,		,	٠.				,							•

<u>L 3210-66</u> EWT(m)/EPF(c)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJM/JD ACCESSION NR: 'AR5008962 S/0137/65/000/001/V052/V052

SOURCE: Ref. zh. Metallurgiya, Abs. 1V328

AUTHOR: Slosman, M. I.

TITLE: Effect of vacuum melting on nonmetallic inclusions in ball bearing steel

CITED SOURCE: Izv. Tomskogo politekhn. in-ta, v. 114, 1964, 43-49

TOPIC TAGS: metallurgy, steel ball bearing, metalworking, nonmetallic inclusion, vacuum melting

TRANSLATION: The effect of vacuum melting on contamination of ShKh-15 steel by nonmetallic inclusions was studied. The melting was done in a vacuum induction furnace in a crucible of MgO at various pressures:  $5 \times 10^{-2}$ ,  $5 \times 10^{-1}$  and 10 mm Hg. Vacuum melting not only reduces the number of nonmetallic inclusions in the metal, but also distributes them more evenly. The inclusions are distributed in the form of a small number of separate crystalline particles. The acidity of the stream of metal during pouring has a considerable effect on contamination of steel by oxide inclusions. G. Lyubimova.

Card 1/2

L 3210-66 ACCESSION NR:	AR5008962		 	0
SUB CODE: MM	I, IE	ENCL: 00		
OC Card 2/2				

L 36548-66

ACC NR: AP6016838

(N)

SOURCE CODE: UR/0046/66/012/002/0261/0263

AUTHOR: Lyamshev, L. M.; Slosina, S. A.

ORG: Acoustics Institute, AN SSSR, Moscow (Akusticheskiy institut AN SSSR)

TITLE: Influence of receiver dimensions on the results of measurements of the wall-pressure pulsation spectrum in the boundary layer

SOURCE: Akusticheskiy zhurnal, v. 12, no. 2, 1966, 261-263

TOPIC TAGS: boundary layer, vibration spectrum, pressure effect, pressure measurement, espectrum ensignis.

ABSTRACT: In view of the lack of experimental data on the influence of the size and shape of the receiver membrane on the pressure-pulsation spectrum, and effect predicted theoretically in several papers, the authors have experimented on pressure receivers of the piston type with round membranes of 5, 10, 20, and 40 mm in diameter. The pressure receivers were mounted flush with the surface of a body of revolution, the walls of which were sufficiently massive and constituted in practice a solid stationary boundary with respect to a stream of water moving relative to the body with a speed of approximately 8 m/sec. The signal from the output of each receiver was recorded on a magnetic tape in the frequency range from 50 cps to 8 kcs.

Card 1/2

unc: 534.6

L 36548-66

ACC NR: AP6016838

An annular spectral analysis of the obtained records in a 10% frequency band was then carried out. The results were compared with the theory and show that the data obtained with a receiver having a 10 mm membrane agreed more or less with the theoretical results. Better agreement for all membrane diameters is obtained if the data are plotted against a modified dimensionless parameter. The relation between the deviations of the experimental data and the closeness of the test frequency to the critical frequency is briefly discussed. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 08May65/ ORIG REF: 004

Cord 2/2/1/LP

CHMURA, Kazimiera, dr inz.; SLOTA, Roman, mar ins.; MYMCZYK, Franciszek, mgr inz.

Problem of industrial utilization of certain raw materials and rocks occurring together with coal deposits and dumped onto the spoil heaps of the Unper Silesian Coal Fasin. Przegl gorn 21 no.2:69-73 F 165.

5/724/61/000/000/016/020

AUTHORS: Al'tman, M.B., Slotin, B.I., Stromskaya, N.P., Eskin, G.I.,

Loktionova, L.I.

TITLE: The degassing of Aluminum and its alloys by ultrasonic vibrations.

SOURCE: Liteynyye alyuminiyevyye splavi; svoystva, tekhnologiya plavki, lit'ya i termicheskoy obrabotki. Sbornik statey. Ed. by I. N. Fridlyanger

and M. B. Al'tman. Moscow, Oborongiz, 1961, 134-143.

TEXT: The paper describes an experimental investigation which deals with the use of ultrasonic (US) vibrations in the degassing of Al and its alloys. A brief state-of-the-art survey is presented. The equipment involved comprising a magnetostrictive transformer, a concentrator, a wave-guide, and a crucible containing the melt are shown in a cross-sectional diagram. The metals tested by means of US vibrations comprised pure Al of grade A00, a medium-strength alloy with good casting properties, namely AA9 (AL9), an Al-Si-Mg alloy, and a high-strength cast alloy, AA20 (AL20), an Al-Si-Cu-Mg alloy. Following the US treatment, the alloys were cast in sand molds, and tensile specimens 10-mm diam and various practical parts were cast. The parts were subjected to X-ray transillumination and hydraulic tests under a 10-at pressure. An empirical gas-content scale was

Card 1/2

The degassing of Aluminum and its alloys ....

S/724/61/000/000/016/020

6

adopted based on the segregation of gas bubbles at the moment of crystallization under vacuum, ranging from 5 points for intensive segregation of gas along the specimen surface to 1 point for crystallization without any visible segregation of gas. In addition, the vacuum specimens were cut in two, and the macrostructure of the sections was inspected after etching with a 10% solution of NaOH. The US treatment of the Al and its alloys was found to be an effective method for degassing. US treatment of an alloy prior to pouring into a mold increases the density and improves the mechanical properties of the castings. The properties are summarized in a fullpage table. It was found that during US treatment of an alloy the alloy becomes saturated with the material of certain vibrators (for example, Mo) as a result of their dispersion under the action of the elastic vibration and of the temperature. It is suggested that this phenomenon may be usefully employed to produce intentional inoculation and alloying of the alloys. It is established that Nb is the most stable material for wave-guides, so that it may be recommended for the making of waveguides from which no inoculation is to occur. There are 4 figures, 2 tables, and 5 references (2 Russian-language Soviet and 3 German-language). Thanks are expressed to the late G.M. Rovenskiy and to G.V. Zhevakina for the performance of the X-ray investigation.

Card 2/2

AYRAPETYAN, M.A.; SLOTIN, N.I.

Studying the & and +g & for sands of differential porosity having different water and oil contents. Trudy Inst.neft1

AN Kazakh.SSR 3:125-132 '59. (MIRA 13:1)

(Oil fields--Electric properties)

AUTHORS: Slotin, V. I. and Eskin, G. I. (Moscow) 24-9-5/33

TITLE: On the effect of ultrasonics on the primary crystallisation of aluminium alloys. (O vozdeystvii ul'trazvukovykh kolebaniy na pervichnuyu kristallizatsiyu alyuminiyevykh splavov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.9, pp. 33-36 + 2 plates (USSR)

ABSTRACT: A considerable number of experimental results have shown that application of an ultrasonic field on an alloy in the process of crystallisation is able to eliminate a columnar structure, accelerate the process of solidification and improve the mechanical properties. However, little data has been published relating to the effects of the ultrasonics on structural changes in aluminium alloys. The aim of the here described work was to study the influence of ultrasonics on the process of primary crystallisation of a cast high strength aluminium alloy of the system Al-Cu-Mg-Si, containing 2.0 Cu, 0.8 Mg, 2.5 Si, 1.0 Ni, 1.0 Fe, 0.3 Ti, rest Al. In the experiments specimens weighing 100 g were subjected to the effect of ultrasonics of 800 kc/sec. It was found that ultrasonics speed the process of solidifica-Card 1/2tion and bring about the formation of a fine micro and

24-9-5/33 On the effect of ultrasonics on the primary crystallisation of sluminium alloys.

macro-structure during primary crystallisation of the above mentioned aluminium alloy in gypsum moulds. Ultrasonic oscillations acting on the solidifying aluminium melt improve the mechanical properties, whereby the strength and hardness increase to a larger extent than the ductility. The method is promising for manufacturing highly stressed small size components. There are 5 figures, 2 tables and 8 references, 7 of which are Slavic.

SUBMITTED: June 29, 1957.

AVAILABLE: Library of Congress.

Card 2/2

SOV/24-58-9-4/31

Al'tman, M.B., Vinogradova, D.V., Slotin, V.I. and AUTHORS:

Eskin, G.I.

The Effect of Elastic Ultrasonic-frequency Vibrations TITLE:

on the Processes of De-gassing Aluminium Alloys (O vozdeystvii uprugikh kolebaniy ul'trazvukovoy

chastoty na protsess degazatsii alyuminiyevykh splavov)

Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh PERIODICAL:

mauk, 1958, mr 9, pp 25 - 30 (USSR)

When elastic vibrations of ultrasonic frequency are ABSTRACT: induced in a molten metal, the resulting excitation

phenomena leads to breaks in the continuity of the liquid phase and to the formation of voids which tend to be filled with the gas dissolved in the melt. Thus,

the elastic vibrations of sonic and particularly ultrasonic frequency promote the nucleation of gas bubbles, their subsequent growth and coalescence into bubbles large enough to rise up spontaneously to the

surface of the liquid phase. The present paper describes the results of experiments in which this effect of

ultrasonic vibrations was utilised for removing hydrogen from an aluminium alloy (AI20) containing 2% Cu, 0.8% Mg,

2.5% Si, 1% Ni, 1% Fe and O.1% Ti. A 10 kW self-exciting

Card1/3

SOV/24-58-9-4/31 The Effect of Elastic Ultrasonic-frequency Vibrations on the Aluminium Alloys Processes of De-gassing

generator was used as the source of the high-frequency electromagnetic (20 kc/s) vibrations. These were converted into mechanical vibrations by means of a magnetostrictive converter which is described in detail and shown schematically in Figure 1. Finding a suitable material for the probe (the part transmitting the mechanical vibrations to the melt) presented the main difficulty in the construction of the converter. The cavitation effects in the liquid surrounding the probe resulted in sudden changes of the pressure causing micro-explosions which in a very short time led to a failure of the probe due to erosion. Fused quartz, steel, steel with opper and a titanium alloy end plates and a titanium alloy VTl were tried. The VT1 alloy was found to be most durable, although this alloy was also eroded to some extent, as shown by the fact that the Ti content of the melt subjected to ultrasonic vibrations for 23 min increased from 0.1 to 0.3%. The degree of de-gassing was determined qualitatively by watching the number and size of the gas bubbles given off in the moment of its solidification by a small sample Card2/3 of the molten metal ladled from the melt with an iron

SOV/24-58-9-4/31
The Effect of Elastic Ultrasonic-frequency Vibrations on the Processes of De-gassing Aluminium Alloys

spoon and placed under an evacuated glass bell (residual pressure - approx. 0.5 mm Hg). In addition the macrostructure of the solidified samples was examined and the effect of the ultrasonic vibrations treatment of various durations on the gas porosity of the investigated alloy is shown in Figures 2 - 4. Increasing the energy of the ultrasonic vibrations did not affect the results of the experiments. With the average energy output of 1 kW, 5 min treatment of the melt at 720-730 °C was sufficient to obtain an alloy free from gas porcsity. There are 4 figures, 1 table and 10 references, 2 of which are Soviet, 7 German and 1 English.

SUBMITTED: May 15, 1958

Card 3/3

sov/180-59-3-15/43

Al'tman, M.B., Slotin, V.I., Stromskaya, N.F. and AUTHORS:

Eskin, G.I., (Moscow)

Change in the Structure and Properties of Aluminium TITLE:

and its Alloys Produced by Ultrasonic Treatment

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 3, pp 88-91 (USSR)

An ultrasonic vibrator UZG-10 was used together with a magnetostriction transducer PMS-9. Alloys tested were ABSTRACT:

A-00 (pure A1), AL-9 (A1-Si-Mg) and high strength AL-20 (Al-Si-Cu-Mg). They were subjected to ultrasound of up to 6-7 W/cm2 intensity and 19-20 kc/s frequency. Fig 1 shows photographs of macrostructures of A-00 and A1-20 before and after ultrasonic treatment. Microstructures are given in Fig 2 and here the differences are less noticeable. Mechanical properties, density and Ti content are given in the table. This shows that ultrasonic vibrations are very effective in degassing aluminium melts giving ingots of higher density.

Mechanical properties are also improved by ultrasonic vibrations eg the tensile strength of Al-9 is increased from 18.8 to 20.2 kg/mm<sup>2</sup>; density and the yield point

Similar increases are observed for are also increased.

11 1/

sov/180-59-3-15/43

Change in the Structure and Properties of Aluminium and its Alloys Produced by Ultrasonic Treatment

other alloys. Ultrasonics were introduced through metal waveguides which were immersed in molten (720-730°C) aluminium. The waveguides were gradually corroded by cavitation and diffusion into molten aluminium. This corrosion effect can be used to introduce refractory materials such as Ti, V, Zr into aluminium and its alloys by using Ti, V, Zr etc as waveguide material. Fig 5 shows the time rate of increase of the Ti content in A-O-O, AL-20 and AL-9 when a Ti waveguide was used. The results obtained are confirmed by X-ray analysis (Fig 3) which showed that ultrasonic vibrations caused grain refinement and polygonisation. There are 5 figures, 1 table and 3 references, 1 of which is English and 2 Soviet.

SUBMITTED: March 4, 1959

Card 2/2

5/724/61/000/000/020/020

AUTHORS: Slotin, V.I., Eskin, G.I.

TITLE: Method for the improvement of the quality of Aluminum-alloy precision

castings.

SOURCE: Liteynyye alyuminiyevyye splavy; svoystva, tekhnologiya plavki, lit'ya

i termicheskoy obrabotki. Sbornik statey. Ed. by I.N. Fridlyander

and M. B. Al'tman. Moscow, Oborongiz, 1961, 171-180.

TEXT: The paper describes an experimental investigation of precision-casting methods for such complex precision items as rotor disks of aviation air-conditioning and cooling turboblowers, which require a close balance for high-rpm operation, a high ratio of the yield limit to the specific gravity, and which necessitate themse of twisted and variable blade profiles which make the advantages of casting over milling especially conspicuous. The paper endeavors to shed light on various problems of the process regimes of the smelting and the pouring of cast Al alloys in vacuum and with the application of ultrasonic (US) vibrations to obtain high-grade rotor-disk castings. The AL9 alloy employed in this investigation is highly suitable for casting but requires a thorough degassing because of its tendency to absorb H during smelting. Also, the AL9 is strength-limited, both at room temperature (T) and at T of the order of 300°C. The investigation, therefore, covered also the AL19 alloy,

Card 1/2

Method for the improvement of the quality ....

S/724/61/000/000/020/020

which exhibits the highest strength of any alloy tested a room T and which also excels by its stress-rupture strength at high T, which however has a tendency toward the formation of microcavities. The investigation, therefore, included the new AL20 alloy (0.8-2.0% Cu, 0.5-1.5% Ni, 2.0-3.0% Si, 0.3-0.8% Mg, 0.8-1.4% Fe, 0.15-0.3% Ti, up to 0.3% Mn, the remainder Al), which was found to be a good compromise alloy for strength and ease of casting. The tests showed degassing by means of the application of US vibration to be the most effective, exceeding by far the quality of the alloys refined by means of volatile chlorides (AlCl2, ZnCl2). The US treatment of the alloy during the process of solidification improves the mechanical properties and the structure of the castings appreciably. The equipment used for the vacuum degassing in the presence of US vibration and the technology of the pouring of AL9, AL19, and AL20 alloys into gypsum molds are described in detail. The mechanical properties of the AL20 alloy, both with and without the action of US vibration, into gypsum molds prior to as well as after heat treatment, are tabulated, and the microstructure of the US-treated and the untreated alloys are shown. A cross-sectional schematic drawing is shown for the equipment used in the combined vacuum and US treatment. There are 7 figures, 3 tables, and 8 references (7 Russian-language Soviet and 1 Englishlanguage paper: DePierre, Foundry, v.84, no.12, 1956). The work was performed at the Institute of metal science and physics, TsNIICherMet (Central Scientific Research Institute of Ferrous Metallurgy), conjointly with I. I. Teumin, M. P. Usikov, and O. N. Guseva. Card 2/2

S/019/62/000/020/030/055 A152/A126

AUTHORS:

Eskin, G. I., Slotin, V. I.

TITLE:

A precision casting device

PERIODICAL: Byulleten' izobreteniy, no. 20, 1962, 45 - 46

TEXT: Class 31c, 15. No. 150986 (748395/22-2 of October 17, 1961). 1. The device for precision easting of rotor discs and turborefrigerator nozzle apparatus, for example has the novel feature that, to produce precise castings with improved mechanical properties and modified structure, the vacuum flask is connected to an ultrasound converter. 2. A device as in 1. is novel in that the vacuum flask is connected with the ultrasound converter by an elastic-hermetic device, e.g. a sylphon, fixed in the oscillatory unit of the waveguide.

[Abstracter's note: Complete translation]

Card 1/1

L 57542-65 EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b) Pr-4/Pu-4 IJP(c) JD/WW/JG ACCESSION NR: AR5015153 UR/0137/65/000/006/G027/G027

SOURCE: Ref. zh. Metallurgiya, Abs. 5G162

AUTHOR: Eskin, G. I.; Slotin, V. I.; Kiryushin, G. S.

TITLE: The influence of the material of an emitter of ultrasonic oscillations on the process of degassing aluminum alloys in an ultrasonic field

CITED SOURCE: Sb. Primeneniye ul'trazvuka v mashinostr. Minsk, Nauka i tekhnika, 1964, 69-76

TOPIC TAGS: degassing, aluminum, aluminum base alloy, chemical sorbent, titanium, columbium, tantalum, cerium, zirconium, hydrogen removal, ultrasonic vibration emitter, ultrasonic field

TRANSLATION: A number of experiments were carried out to determine the capacity of several metals (titanium) columbium; tantalum; cerium; and zirconium) to chemisorb hydrogen contained in melts of aluminum and its alloys. For this purpose, 10-12 kilograms of cast aluminum alloy was melted in a crucible cord #3

L 57542-65

Card2/3

ACCESSION NR: AR5015153

3

furnace and the metal absorber was introduced into the melt in the form of a thin rod at a temperature of 710-720C. The chemisorbtive effect of titanium was the most effective. Introduction of other metals into the melt produced a smaller effect. The process of absorption of hydrogen from an aluminum alloy by a titanium rod proceeds more energetically at a low temperature of the melt. A titanium rod is capable of absorbing hydrogen from a melt up to determined limits, so long as the average hydrogen content in it is less than or equal to 500-550 cm<sup>3</sup>/ 100 grams, at a melt temperature of 710C. To determine the influence of ultrasonic oscillations on the process of absorption of hydrogen by titanium, a titanium rod was introduced into the melt and then the melt was subjected to the action of ultrasonic oscillations. The effectiveness of ultrasonic degassing increases with an increase in the temperature of the melt, while with the use of a metal absorber a reverse effect is observed. On the basis of the experiments the conclusion is drawn that the effectiveness of degassing with the use of one or another material for the ultrasonic emitter cannot be explained merely by the chemisorptive capacity of the material and the speed of its dispersion in the melt. It is proposed that the main factor which determines the effectiveness of degassing by ultrasonic

				•			•		· · · · · · · · · · · · · · · · · · ·				
	L 57542-6	5		a La companyanyanyanyanyanyan		· ·					د میدهوسی		¥
	ACCESSI		R: AR50	15153							(	<b>)</b>	1.
-	ogcillatio	na ia	the acou	stic pro	perties	of the n	naterial o	f the en	nitter	. G.	Svo	dtsev	
												<u> </u>	
	SUB COL	E: MI	VI.			E	NCL: 00						
۱				•	•								
									•				
						. ــــــــــــــــــــــــــــــــــــ					<u> </u>		
											and the second		
1	•								,				
													100
1										· /			
				. extra line								n debot Naviat	
										* · · .			
					, i			. •					1
			Jucti					*			1		
	No	^						. •		•			
	Card 3/3	<b>,</b>								لعابه هيندن			
٠,١													4 1 3

1 33310-65 FPA/EUP(1)/EPF(n)-2/EPR/T-2/EPA(bb)-2 -Pas-L/Ps-L WW-8/0286/65/000/003/0033/0033 ACCESSION NR: AP5007160

AUTHOR: Slotin, V. I.; Kharlamov, B. V.; Nikolayev, N. N.

TITLE: Turboccooler. Class 17, No. 167903

SOURCE: Byulleten' izobreteniy i tovernykh znekov, no. 3, 1965, 33

TOPIC TAGS: turbocooler, turbine, ventilator, fan

ABSTRACT: An Author Certificate has been issued for an air turbocooler with the turbine wheel and the ventilator wheel in a common housing and connected by a shaft. The shaft rotates on ball bearings resting on the housing, which is provided with channels to permit circulation of the cooling air. The efficiency of the turboccoler has been improved by installing in the upper part of the ventilator an annular admission chamber connected by openings with channels in the housing of the bearings and separated from the turbine cavity by a membrane. Orig. art. [AC] has: 1 figure.

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po aviatsionnoy tekhnike

SSSR (State Committee on Aviation Technology, SSSR)
SUBMITTED: 29Jun64

SUB CODE: PR

NO REF SOV: 000 Card\_1/1

OTHER: 000

3208 ATD PRESS:

L 57878-65 EMG(r)/EMT(1)/EMT(m)/EMG(m)/T-2 Pz-6 UR/0286/65/000/010/0035/0035 621.572/576;629.13.01/06

AUTHOR: Voronin, G. I.; Slotin, V. I.; Bragin, A. N.; Popova, A. T.; Zhorin, M. Ye.; Feklisov, M. A.

TITLE: Turbocooler. Class 17, No. 171006

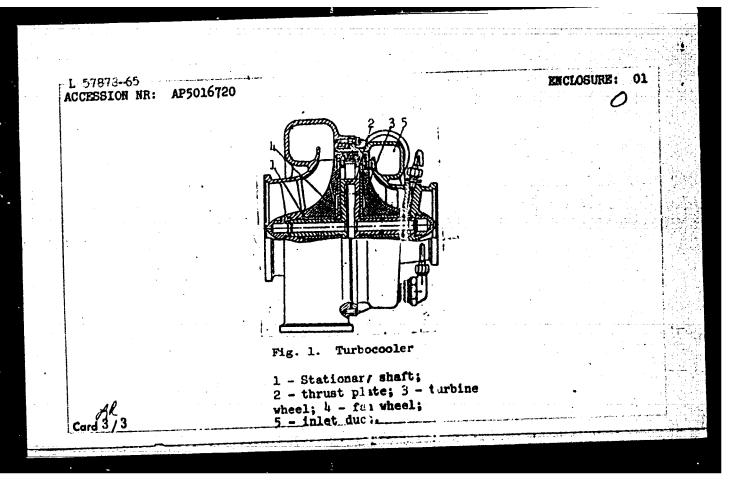
SOURCE: Byulleten' izcbreteniy i tovarnykh znakov, no. 10, 1965, 35

TOPIC TAGS: aircraft air conditioning, air conditioning, aircraft cabin 4

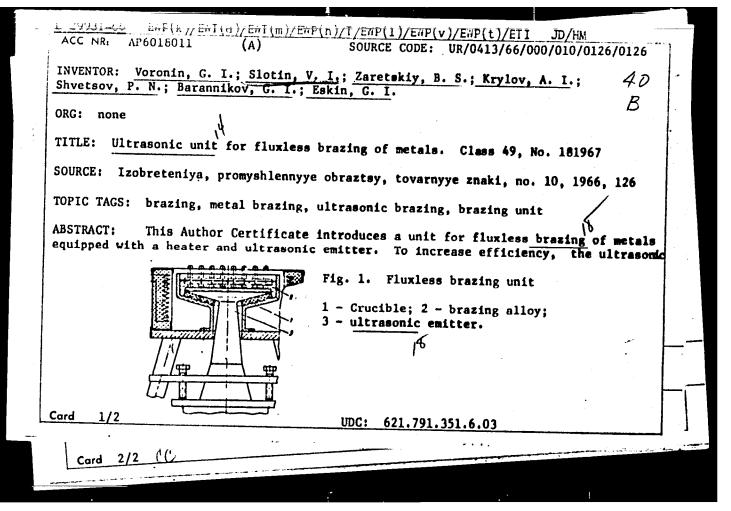
ABSTRACT: This Author Certificate introduces a turbocooler (see Fig. 1 of the Enclosure) for air-conditioning airtight compartments in an aircraft. The turbine and fan rotors are joined to each other along their outer diameters and rotate on a gas-lubricated bearing. In order to increase the efficiency of the turbocooler at high speeds, the stationary shaft is hollow and has a thrust plate serving simultaneously for the turbine and fan rotors as a thrust bearing to which a lubricating gas is supplied from the turbine inlet nozzle through the hollow shaft. Orig. art. has: 1 figure.

Card 1/3

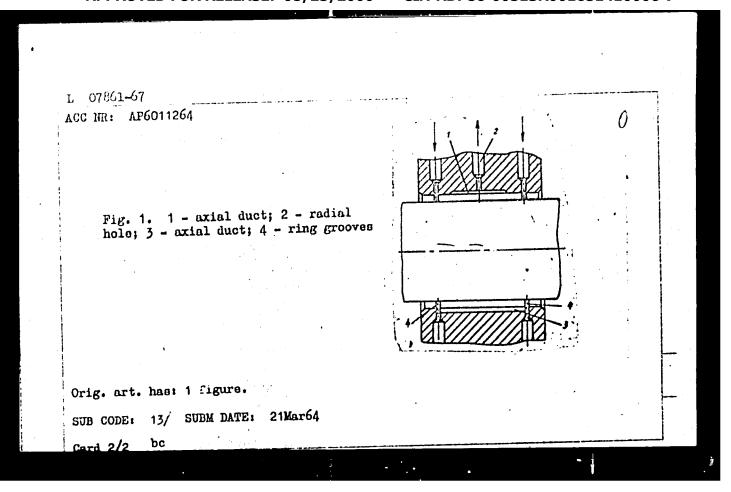
<b>!</b> ~-	L 578	73-65	R: AP501	5720	e displacements o appropriate displacement		again an	a to a surgery and some or to				/	
.		ION NI			gosudars committee	tvennog	o komit	eta po s Engineeri	viatsi ng, 88	onnoy to <u>SR</u> )	ekhnike	SSSR	
- 1	COLKER COLKER		27Mar64			ENCL:			SUB	CODE:			
:		F 60V:				OTHER:	000		ATD	PRESS:	4038		
.			·		•	•							
							<u>.</u>						
								• •			:		
				• .		•	•						
	Caru	2/3				٠ .					en e	e de la compansión de l	5



L 417	NR: AP50	24393					;)JD/W : UR/026		00/015/	0073/0073
THIFTH	MOD									
TUATU	104: P10	C17, \	155	Eskin, G.	I.; Kiryusi	iin, G.	8.			51 B
ORG:	none			. ,				•	in the state of th	
TITLE	: Method	of de	ogagin	g molten	aluminum and	44,55	um allam		. 21 W.	. 1722 <b>8</b> h
			19	P.					31, M	3. T(3304)
BOURC	E: Byull	eten'	izobre	teniy i to	ovarnykh zne	kov, no	. 15, 196	5, 73	-	
TOPIC	TAGS: d	egassi	ng, al	uminum de	gassing, alu	minum a	lloy dega	ssing		
1								•		5.4.4
45000										
ABSTR	ACT: This	s Auth	or Cer	tificate :	introduces a	method	for the	degassi	ng of i	molten
alumi	num and al	Auth Luminu	or Cer	tificate :	chieve the m	ost com	plete deg	assing	and sin	ultaneous
alloy	num and al ing, gette	Auth Luminu er met	or Cer m allog	tificate : ys. To ac ch as tite	introduces a chieve the m anium, niobiu etal in the	ost com	plete deg onium. Va	assing nadium'	and sin	ultaneous
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the m anium niobiu	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alloy:	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]
alumin alloy: lanthe	num and aling, gette anum are i	Auth Luminu er met added	or Cer m allog als suc to the	tificate : ys. To a ch as tite molten me	chieve the manium, niobiu etal in the	ost com m, zirc form of	plete deg onium, va sponge o	nadium,	and sin	ultaneous u, or [AZ]



SOURCE CODE: UR/0413/66/000/006/0108/0108 DJ gwr(m) 07861-67 ACC NR: AP6011264 AUTHORS: Voronin, G. I.; Slotin, V. I.; Bragin, A. N.; Popova, A. T.; Zhorin, M. 34 Ye. B TITIE: A gasostatic bearing of high rotary velocity. Class 47, No. 180021 SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 108 TOPIC TAGS: gas bearing, bearing stability, vibration damping ABSTRACT: This Author Certificate presents a gasostatic bearing of high rotary velocity. The bearing contains gas ducts located in two rows at the circumference. To lead away the dirt from the stagmant zone of the working space in the bearing and to increase the resistance of the shaft to vibrations, the internal surface of the bearing contains an axial duct connected by a radial hole to the surface of the bearing (see Fig. 1). The polarly opposite side carries another axial hole connect ing both rows of the ducts. UDC: 621.822.5



L 58956-65 . EWT(m)/EWP(1)/EWP(b)/EWP(t) JD		
ACCESSION NR: AR5012742	UR/0276/65/000/001/B070/B070 621.357.7:669.3:669.14	
SOURCE: Ref. zh. Tekhnologiya mashinostroyeni	ya. Svodnyy ton, Abs. 18427 17	
AUTHORS: Nemova, L. A.; Slotina, E. D.		
TITLE: Technological process of direct acid	opper-plating of steel	
OTTED SOURCE: Tr. Vees. ni. in-ta tekhnol.	elektromashino- i apparatostr.,	
TOPIC TAGS: plating, copper cladding, steel, solution	electroplating, electroplating	
TRANSLATION: Research and development of a tecopper-plating of steel without preliminary converse carried out. As a result of these invest developed which allows direct galvanic plating adhesion to the base. The technological method	opper-plating in cyanic electrolytes ligations an electrolyte was of copper on steel with good od includes electrochemical degreasing	
in a solution of composition (in g/liter): so	odium nydroxide - 30, sodium chronizos	
······································		

			. • •				•		
58956-65		•	and the second					0	
ACCESSION N	R: AR50127	Lo and	sodium :	silicate	-5 at a	temper	ature of	7)-900, 00 for	
and a curre	tdees br	no at room	temperat	ture for	0.5-1 111	Tri Ovo	t room te	meratur	
of sulfurio	c acid (2007)	r-plating i	n an ele	ctrolyte	of combo	active	compounds	er) t DB and	
copper sul	fate - 200, hing in runr	ammonium s ning water;	and dr	ying in	not air s	t 90C.		\$ 25 	
SUB CODE:		•	ENCL:	00					
				• • .	•				
			. ,						
<u>.</u>									
						•			
ŧ									
		•				•			

Technical information service at the Ural Failroad-Car Flant.

Mashinostroitel' no.12:33 F '63.

(Nishniy Tagil—Railroads—Cars)

(Nizhniy Tagil—Technology—Information services)

SLOTINTSEV. M. N.

Cand. Tech. Sci.

Dissertation: "Experimental Study of the Behavior of Fibers in the Racking Devices of Spinning Machines."

3 Mar. 49

Moscow Textile Inst.

SO Vecheryaya Moskva Sum 71

ANTSUTA, Ye.B., arkhit.; KIRILLOV, N.P., arkhit.; KUZNETSOV, V.V., arkhit.; SIOTINTSEVA, M.N., arkhit.; PYATIN, S.G., inzh. Prinimali uchastiye:

SIOTINTSEVA, M.N., arkhit.; PYATIN, S.G., arkhit.; GLAZKOV, F.I.,
CHUYENKO, R.G., arkhit.; MOSEVICH, Ya.Ya., arkhit.; GLAZKOV, F.I.,
st. tekhnik; GOLUKHOV, G.I., inzh.; SAMSONOVA, T.T., inzh.; KOLESOVA,
Ye.Ye., st. tekhnik; MAKAROVA, T.N., tekhnik; SHAMBAT, M.S., inzh.;
SEMENOVA, G.V., inzh.; PLATUNIN, Yu.S., gr. inzh.; VOL'NOVA, T.F.,
tekhnik; SOLOV'YEV, M.I., inzh.; MOREV, I.A., tekhnik.

[Two-apartment house with two-room apartments; standard plan 1-102-5]
Dvukhkvartirnyi zhiloi dom, kvartiry v dve komnaty; tipovoi proekt
1-102-5. Mpskva. Al'bom 1. 1960. 27 p.

(MIRA 14:10)

1. Moscow. TSentral'nyy institut tipovykh proyektov.
(Apartment houses—Designs and plans)

- 1. E. L. EKSHOV, Eng., I. YA. SLOTOV. Eng.
- jesk (600)
- 4. Apartment Houses Moscow
- 7. Experiment in building a nine-story apartment house with a metal framework.

  Gor.khoz. Mosk. 23 no. 9. 1949

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

CIA-RDP86-00513R001651410006-7" APPROVED FOR RELEASE: 08/25/2000

ENA(j)/ENT(m)/T/ENA(b)-2 SOURCE CODE: CZ/0053/65/014/004/0286/0286 L 13469-66 ACC NR. AP6006026 AUTHOR: Slotova, J.; Karpfel, Z. ORG: Biophysics Institute CSAV, Brno (Biofysikalni ustav CSAV) TITLE: Comparative studies of chromosomal aberration in rootlets of Vicia faba following irradiation and effect of DNA [This paper was presented during Biophysical Days, Brno, 11 Jun 64. SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 286 TOPIC TAGS: experiment animal, bone marrow, mitosis, genetics, DNA, radiation biologic effect, plant genetics ABSTRACT: Metaphase and anothase chromosomal aberrations after 150 r or application of isogenic or allogenic (murine bone marrow) DNA at 0.001%. While radiation affected indiscriminantly all chromosome sizes, foreign DNA was more apt to affect the smaller chromosomes; probably affecting mainly replication in the S phase. [JFIS] SUB CODE: 06 / SUBM DATE: none Card 1/1

# SLOTOVA, Jana; KARPFEL, Z.

The question of the effectiveness of cell-free spleen extract in the treatment of radiation sickness. Folia biol. 7 no.6:412-414 161.

1. Institute of Biophysics, Czechoslovak Academy of Sciences, Brno. (SPLEEN extracts) (RADIATION PHOTECTION exper.)

Dissertation: "Lone irothers of the Technology of Lisulthite Tolutions (Turmenney (Tower?) Acid of the Calluloge Injuntry)." Cami Tech aci, Esseow Chemicotechnological Instiment D. I. Ferdeleyev, Esseow, 1963, Referatively Aburnal-Chimiya, No. 7, Apr. 54.

SG: SUM 284, 76 Nov 1964

Obtaining sulphite acid in a bubble column with inclined screen plates. Bum. prom. 29 no.10:5-7 0 '54. (MLRA 7:11)

1. Moskovskiy ordena Lenina khimiko-tekhnologicheskiy imstitut im. D.I.Mendeleyeva (for Kus'minykh i Slotvinskiy). 2. Moskovskiy filial TsNIIB.

(Sulfite liquor)

KUZ'HINYKH, I.M., professor.; SLOTVINSKIY, H.P.; KUZNETSOVA, A.G.

Obtaining sulfite acid from crushed limestone. Bum.prom.30 no.4:5-8 Ap '55. (MLRA 8:6)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva i Moskovskiy filial TSentral'nogo nauchno-issledovatel'skogo instituta bumagi. (Sulfites)

S/133/60/000/004/005/0:0 A054/A026

AUTHORS: Slotvinski-Sidak, N.P., Candidate of Technical Sciences;

Potapov, V.I., Engineer

TITLE: Calcination of Vanadium Slags in a Fluidized Bed

PERIODICAL: Stal', 1960, No. 4, pp. 327 - 329

TEXT: The conventional method of calcination in rotary kilns is a complex process involving three phases (solid phase-slag, liquid phase-alkaline additives and the formation of vanadates, gaseous phase - the oxygen of the air). About 88 - 90% of vanadium is converted into soluble compounds and 70 - 80% of this quantity is recovered by water. In order to simplify the process and to recover more vanadium research was carried out on calcitation in a fluidized bed with a charge consisting of crushed and granulated vanadium-containing slag as available in the Chusovskiy zavod (Chusovoy Plant) and alkaline additives (sylvinite, potassium chloride or sodium sulfate). After crushing and removing the ferrous residue, the composition of the slag was as follows (%): V203 9.4; Si02 23.8; CaO 0.8; MgO 1.65; Al203 vas as follows (%): V203 9.4; Si02 23.8; Temet 2.1; P205 0.1

Card 1/3

Calcination of Vanadium Slags in a Fluidized Bed

S/133/60/000/004/005/010

The laboratory equipment used in the tests consisted of a quartz column 1 m high having an inner diameter of 60 mm, into which a horizontal fireclay plate was fitted. In this plate caps with lateral apertures were mounted. In the lower part of the column an electrical heating coil was installed to preheat the air flowing to the fluidized bed to 600 - 700°C. In order to obtain the calcination temperature of 750 - 900°C, the column was mounted on a silite furnace. Temperature was controlled by a chromel-aluminum thermocouple with galvanometer. The rate of the air flow in the column was about 1.3 . 1.6 m/sec. Before granulating, the charge was crushed to a size of 0 - 0.07 mm, which promoted the conversion of vanadium into soluble compounds, then it was dried until a humidity of 4 - 5% was attained. Optimum yield was obtained when calcinating granules of 0.5 - 3.0 mm size. this size the yield of soluble vanadium compounds decreased. The tests showed that the decomposition of alkaline additives was limited on account of the oxygen diffusion at the place of reaction. Calcination in a fluidized bed speeds up the decomposition of alkaline additives. An addition of sylvinite reduces the reaction time to 15 - 20 min, i.e., it is several times quicker than when applying periodical stirring. The best results with regard to the amount of additives were obtained when adding 8 - 10% of alka-

Calcination of Vanadium Slags in a Fluidized Bed A054/A026 S/133/60/000/004/005/010

line additives (NaCl; Na2SO4). This corresponds to a ratio of Na2O  $\pm$  V2O5 = 0.30 - 0.45. The graph shown in Figure 2 represents the rate of vanadium recovery of grains calcinated with water and a 7%-solution of sulfuric acid with the addition of 10% sylvinite and 10% sodium sulfate solutions as a function of the duration and the temperature of calcination. The optimum calcination temperature for charges with sylvinite was at 800°C and with sodium sulfate at 850°C. Over 880°C the grains are sticking together, below 800°C the decomposition of the alkaline additives and the recovery of vanadium-containing ores is incomplete. A maximum (97 - 98%) yield can be obtained when calcinating with sodium sulfate; 94 - 95% of this quantity will be extracted by water. In the solid residue 0.3 - 0.6% of V205 is contained after extraction. The tests showed that upon crushing the charge, as a result of the close contact between the components and the mixing of the grains in the fluidized bed, the calcination of the vanadium containing slag was accelerated and transformed into soluble compounds in a quantity 5 - 7% greater than that obtained by conventional methods. Preliminary granulation of the charge decreased the cycles of extraction and rendered possible the application of pulps prepared in high-powered centrifuges. There are 2 figures.

ASSOCIATION: Tenlichm

Card 3/3

SLOTVINSKIY-SIDAK, N.P.; KOLFAKOVA, V.I.

Structure of vanadium slags and the recovery of vanadium. Izv.

vys. ucheb. zav.; chern. met. 4 no.8:37-42 61. (MIRA 14:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii i Chusovskoy metallurgicheskiy zavod.

(Seg) (Vanadium)

s/133/62/000/001/001/010 A054/A127

AUTTHOR:

Slotvinskiy-Sidak, N. P., Candidate of Technical Sciences

TTILE:

Vanadium extraction from ferro-vanadium (titanium-magnetite) consen-

trates by the direct method

PERIODICAL: Stal', no. 1, 1962, 9 - 13

The extraction of vanadium from ferro-vanadium concentrates is carried out either metallurgically or hydrometallurgically. In the latter case the finely crushed concentrate is granulated with alkaline additives (sodium-sulfate TEXT: or calcined soda) and afterwards the pellets are subjected to roasting (oxidizingsoda treatment). As more vanadium can be extracted by the hydrometallurgical process than by the metallurgical one, tests were made at the TsNIIChM, with variadium concentrates of Soviet and Chinese deposits. The vanadium-containing ores (mainly magnetite and ilmenite) were crushed to -0.074 mm size, subsequently after adding water (12 - 14%) and an alkaline substance (anhydrous sodium sulfate), they were granulated to 12 - 28 mm size. The technological process is shown in a diagram. The tests showed that the optimum amount of Na 2504 must be 5%. The charge was roasted to ensure the most complete oxidation of magnetite to hematite

card 1/3

S/133/62/000/001/001/010 A054/A127

Vanadium extraction from ...

at the optimum temperature of 900°C, with a holding time of 2 - 3 hours and afterwards by increasing the temperature to 1,200 - 1,250°C. The concentrates used in the hydrometallingteal process should not contain more than 3% \$102. If the silterum content is lower, the temperature and the roasting time must be increased. In this way vacadium is transformed more thoroughly into soluble compounds. The chemical reactions that take place during roasting are the following:

 $2PeO \cdot V_2O_3 + 2.5 O_2 = Pe_2O_3 + 2V_2O_5;$   $N_4 \times 3O_4 = N_4 \times 0 + SO_2 + 0.5 O_2;$   $mV_2O_5 + mN_4 \times 0 = mV_2O_5 \cdot mN_4 \times 0.5 O_2;$ 

The presence of CaO in the concentrate is not favorable, because, when roasting the pellets, it forms compounds with Va<sub>2</sub>O<sub>5</sub> which are not easily soluble in a weak alkaline medium. When CaO is present in the concentrate, the soda-extraction promotes another that each of the water-extraction process. It was found that when the concentrates contain lime (Volkov, Kachkanar - deposits), they become impurified by selfur if roasted with sodium sulfate. These concentrates should be processed with diluted solutions of hydrochloric acid and then cleaned with water.

Card 2/3

S/133/62/000/001/001/010 A054/A127

Variadium extraction from...

By the hydrometallurgical process it was possible to extract about 78 - 90% of vanadium. The vanadium pentoxide, obtained by means of hydrolysis from solutions, contains about 3 - 5% impurities after extraction. When sedimenting these solutions with ammonium chloride, a product can be obtained whose  $V_2O_5$ - contant is 98%, after an additional roasting. (According to the Editor's Note, the article does not discuss the drawbacks of this process, which still have to be eliminated. The tests were carried out with the assistance of engineers V. I. Potapov. and M. P. Kuznetsova. There are 7 figures and 4 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: TSNIICHM

Card 3/3

Vanadium extraction from converter slags

S/149/62/000/003/004/011 A006/A101

roasting in a multi-zone fluidized-bed furnace and leaching vanadium out of the grains in tubular lixiviation units. It was established that the granulation of a charge, consisting of refined slags and sylvinite or sodium sulfate, proceeds without difficulties. The yield of 0.5 - 3 mm raw granules from a cup-granulator of 1 m in diameter is 1,040 - 1,450 kg/hour. It is shown that oxidizing roasting with sodium, of the granules in a fluidized-bed furnace proceeds at a high rate; the roasted material is well mixed. To prevent caking of granules the charge is heated from 700 - 750°C to 800 - 850°C by fuel combustion in the bed. Preliminary data obtained on the aforementioned Mekhanobrohermet unit show that the specific efficiency of a fluidized-bed furnace is 30 - 36 tons/m² of roasted granules per day. Total vanadium extraction from granules with sodium sulfate and sylvinite is about 92.6%, and 85% in water lixiviation. There are 5 figures.

ASSOCIATION: Tsentral nyy nauchno-issledovatel skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy)

SUBMITTED: October 28, 1961

Card 2/2

SLOTVINSKIY-SIDAK, N.P., kand.tekhn.nauk; Prinimali uchastiye: POTAPOV, V.I., inzh.; KUZNETSOVA, N.P., inzh.

> Vanadium recovery directly from iron-vanadium (titanium-magnetite) concentrates. Stal! 22 no.1:9-13 Ja 162. (MIRA 14:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy 1. Toe....
metallurgii.
(Vanadium)

(Hydrometallurgy)

FEDOROV, P.I.; SLOTVINSKIY-SIDAK, N.P.; TSIMBALIST, T.N.

Solubility in the system vanadium pentoxide - sulfuric acid - water. Zhur. neorg. khim. 8 no.11:2593-2596 N '63,

(MIRA 17:1)

SLOTVINSKIY-SIDAK, N.P.; FEDOROV, P.I.; AKULKINA, L.M.; LOVETSKAYA, G.A.; SITDYKOVA, N.S.

Production of pure vanadium pentoxide from process solutions. Zhur. prikl. khim. 36 no.11:2367-2372 N 163.

(MIRA 17:1)

SLOTVINSKIY-SIDAK, N.P.; POTAPOV, V.I.; AVERIN, P.I.

Precipitating pure and chemically pure vanadium pentoxide from alkaline solutions. TSvet. met. 38 no.5:67 My '65. (MIRA 18:6)

SLOTWINSKA, Halina; SLOTWINSKI, Jan

Comparative characteristics of gland mucopolysaccharides. Postepy hig. i med. dows. 15 no.3:267-284 161.

1. Z Zakladu Histologii i Embriologii PAM w Szczcinie Kierownik: prof. dr J.Slotwinski.

(ENDOCRINE GLANDS metab)
(MUCOPOLYSACCHARIDES metab)

### SLOTVINSKA, Ludmila

Reticulosarcoma or reticulosarcomatosis; autopsy findings. Otolar. polska 8 no.1:15-20 1954.

1. Z Zakladu Anatomii Patologicsnej Akademii Medycsnej w Marssawie, kierownik: profesor dr med. Ludwik Passkiewics oras z Eliniki Otolaryngologicsnej Akademii Medycsnej w Warssawie, kierownik: prof. dr med. A.Dibrzanski.

(SARCOMA, RETICULUM CELL, multiple)

SLOTVINSKA, Ludmila (Vorssawa, Novogrodska 59)

Adenoma ceruminosum; ambulatory case. Otolar. polska 8 no.4:325-327 1954.

1. Z Kliniki Otolaryngologicznej Akademii Medycznej w Warszawie.
Kierownik: prof. N.Lewenfisz.
(BAR, EXTERNAL,
adenoma, ceruminous)

# Neurological changes in glomus jugulare tumor (chemodectoma) of the middle ear. Otolar poleka 14 no.1:61-67 '60. 1. Z Kliniki Otolaryngologicanej A.M.w Waresawie, Kierownik: prof. dr med. J. Szymanski. (OLOMANGIOMA diag.) (ZAR MIDDLE neopl.) (NEUROLOGICAL MARIFESTATIONS)

CZARNECKI, Henryk; SLOTWINSKA, Ludmila

Therapeutic management of ozena in the Otolaryngological Clinic of the Academy of Medicine in Warszaw. Otolar. polska 16 no.2:387-392 162.

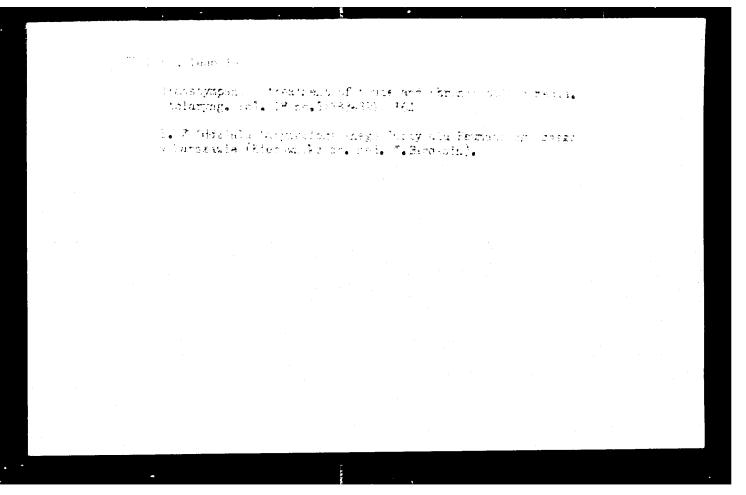
J. Kierownik: prof. dr med. J. Szymanski. (RHINITIS ATROPHIC ther)

OSUCHOWA, Judwiga; SLOTWINSKA, Ludmila

Contribution to cases of reticulosarcomatosis. Otolaryng. pol. 17 no.1:117-121 63.

1. Z Kliniki Otolaryngologicznej AM w Warszawie Kierownik: prof. dr J. Szymanski. (SARCOMA, RETICULUM CELL)

(LARYNGEAL NEOPLASMS) (SKIN NEOPLASMS)



SLOTWINSKA, Ludmila

Conditions of the upper respiratory tract in pulmonary and bronchial diseases. Wiad. lek. 18 no.13:1065-1069 1 J1 \*65.

1. Z Oddzialu Taryngologicznego Instytutu Reumatologicznego w Warszawie (Kierownik: dr. med. T. Bardadin).

SLOTWINSKI, B.

Changes in the arbitration procedure. p. 4. (ROINIK SPOLDZIELGA. Vol. 9 (i.e.10) no. 16, Apr. 1957, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

# SINTILLEI, B.

Arbitration procedure before appealing to the Arbitration Cormission.

p. 5 (dolink Spolozielca. Val. 9 (i.e. 10) no. 46, Nov. 1957. Warszaw, Polond)

henthly Index of East European Accessions (EEA1) 10. Vol. 7, no. 2, February 1958

S

POLAND / Human and Animal Morphology (Mormal and

Pathological). Digestive System.

: Ref Zhur - Biologiya, No 4, 1959, No. 16884 Abs Jour

: Slotwinski, Jan Author

: Not given Inst : On the Chemical Nature of Secretion of the Title

Gustatory Glands of Ebner in the Rabbit

: Folia morphol., 1957, 8, No 1, 35-40 Orig Pub

: The granules of secretion of the Ebner Abstract glands are metachromatically stained blue

with thionine and celestine and red with mucicarmine, which indicates the mucosal character of the above secretion.

Card 1/1

10

SLOTWINSKA, Halina; SLOTWINSKI, Jan

Comparative characteristics of gland mucopolysaccharides. Postepy hig. i med. dows. 15 no.3:267-284 161.

1. Z Zakladu Histologii i Embriologii PAM w Szczcinie Kierownik: prof. dr J.Slotwinski.

(ENDOCHINE GLANDS metab)

(ENDOCRINE GLANDS metab)
(MUCOPOLYSACCHARIDES metab)

SLOUCKA, J.

Development of aeration jets in the aeration of waste water. p. 56.

VODA Vol. 35, no. 2, Feb. 1956

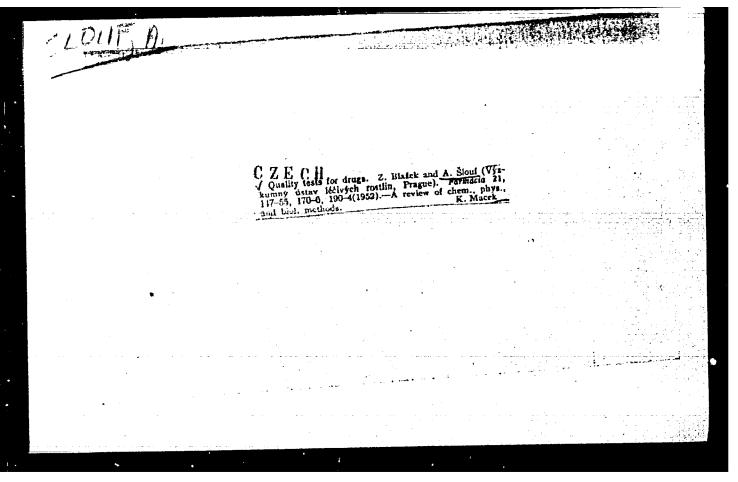
Czechoslovakia

Source: EAST EUROPEAN LISTS VOl. 5, no. 7 July 1956

SLOUF, ...

Para-aminopalicylic acid. Cas.cask.lek. 63 no.19:226-228 15 Oct. 1950. (CIML 20:1)

1. Of the Fourth Branch of the State Health Institute, Prague.



SLOUF, A.

Isonicotinic acid hydrazide; analytic review. Cesk. farm. 2 no.5:168-171 May 1953. (CIML 25:1)

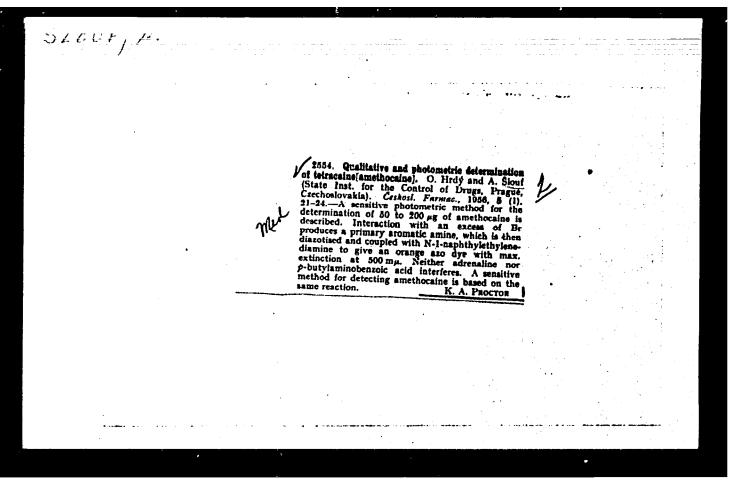
HRDY, O.; JUNG, Z.; SLOUF, A.

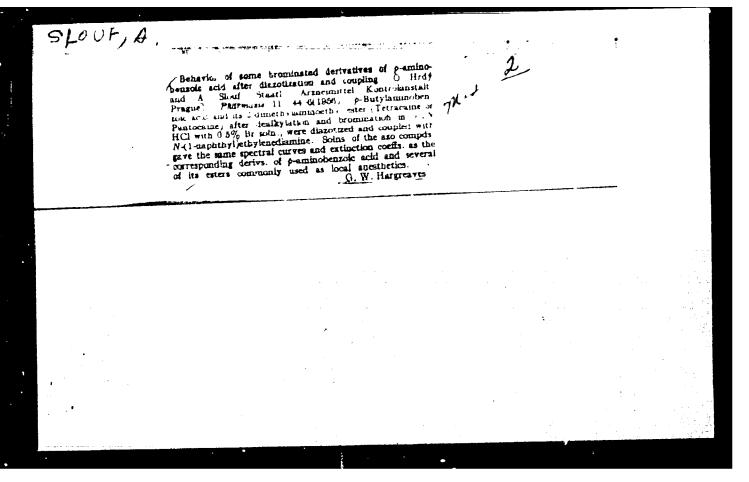
Identification, partition and determination of digitalis glycosides. 2. Partition and determination of single lanatosides and desacetyllanatosides in lanatoside ABC. Cesk. farm. 4 no.8:395-400 Oct 55.

1. Ze statniho ustavu pro kontrolu leciv.

(DIGITALIS, determination

single lanatosides & desacetyllanatosides in
lanatosides ABC.)





H-17 : Czechoplowskia JOUR BEST CALEGURI ARS. JOUR. : RZKWIE., 80. 21 1950, 20. 75812 : Slouf, A. auge of : विके हो राज : The Flotometric Decermination of Keto Compounds in Chloremphenicol ORIG. PUB. : Coskoslov Farmac, 8, No 2, 77-79 (1959) : A new meshed has been developed for the photometric LBSTRACT Getermination of keto compounds in chloramphenical, based on the ability of the keto group to effect the reduction of a mixture of presphotungstic and phosphosolybdic acids to Molybdenum Blue. The method is simple, fast, and relatively sensitive, permitting the determination of 50-400 micrograms of keto compounds (1-p-nitrophenyl-2-dichloroacetamido-3-hydroxy-1-one) in 0.1 gm DL-chloramphenical with satisfactory accuracy. From suthor's summary 04:0:1/1

	Slouka, Hubert:  Pohledy do nebe; problémy a výsledky moderní astronomie. 14. vyd. 1 Pruha, Orbis, 1949.			ő
		orts., maps. 25 cm. (Deli		
	1. Astronomy. r. Title.  QB43.S63 1949		52 <b>-</b> 64019	
	Library of Cenge	resa (\$)	•	
Geo	•	÷ 1 ·		
	A Look at the Skies; Astronomy. #60	Problems and Ach	nevements of Hodern	

SLOUKA, H.

"Castor, a multiple-star system." p. 10. (Rise Hvezd. Vol. 34, no. 1, Feb. 1953. Praha.)

SO: Monthly List of East European Accessions. Vol. 3, No. 2, Library of Cong., Feb. 1954, Uncl.

"The age of virious Science" p. 37. (RISE HVEID, Vol. 3., no. 0, 183, Fraha.)

SC: Monthly List of East European Accessions, Vol. 2, # 10 Library of Congress Cetaber 1959, Usel.

SLOUKA, H.

"Copernicus' way to the solar system." p. 108

"One-hundredth anniversary of Christian Doppler's death." p. 114. (Rise Hvezd. Vol. 34, no. 5,

June 1953. Praha.)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Cong., Feb. 1954, Uncl.

GLOUKA, H.

"New distances in the universe." (p.209). RISE HVEZD. (Ceskoslovenska spolecnost astronomicka) Praha. Vol. 34, No. 9/10, Dec. 1993.

SO: East European Accessions List, Vol. 3, No. 8, Aug 1954.

SLOUKA, H.

"Rotation of Galaxies." (To be contd.) p. 56, Praha, Vol. 35, no. 3, Mar. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress